

Alaskan Copper Works
3600 E. Marginal Way

Alaskan Copper is submitting this request for a Metro Waste permit at this time although the building is not presently in use. During the time period that the Metro permit will cover it is likely that this building will be used periodically at the levels indicated. Should the use be more than anticipated your office will be notified.

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permit issued

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You will find detailed instructions for completing each section of this application and each required exhibit in the enclosed packet, "Wastewater Discharge Permit Application and Exhibits—Instructions and Guidelines." Review the entire application and instruction packet carefully before completing any part of the application.

- ☒ Submit one application for each site.
- ☒ Answer all questions and include the required exhibits. Incomplete applications will be returned to you.
- ☒ If you do not have an answer for the requested information, indicate so and explain why.
- ☒ Indicate "NA" if a section does not apply to your operations.
- ☒ Use additional pages, if needed.
- ☒ No application fee is required. You will be billed a permit fee if a permit is granted.
- ☒ Send five copies of the completed application and exhibits to:

Municipality of Metropolitan Seattle
Industrial Waste Section
130 Nickerson Street, Suite 200
Seattle, Washington 98109-1658

SECTION A—BUSINESS NAMES AND ADDRESSES

APPLICANT BUSINESS NAME: <u>ALASKAN COPPER WORKS</u>	
ADDRESS OF SITE DISCHARGING WASTEWATER: <u>3600 E. Marginal Way</u> Street Address <u>Seattle WA 98134</u> City, Zip Code	BUSINESS MAILING ADDRESS: <u>P.O. Box 3546</u> Street Address <u>Seattle, WA 98124</u> City, Zip Code
PERSON TO BE CONTACTED ABOUT THIS APPLICATION:	
Name <u>James Brown</u>	Telephone No. <u>(206) 623-5800</u>
Street Address <u>3200 6th Ave South</u>	Title <u>Operations Manager</u>
	City, Zip Code <u>Seattle WA 98134</u>

SECTION B—GENERAL BUSINESS INFORMATION

1. REASON FOR APPLICATION

Briefly describe the main activities at the applicant site (type of manufacturing, service, remediation).

Passivation of fabricated stainless steel pipe and Fittings using a 10% nitric acid solution bath.

2. PERTINENT IDENTIFICATION NUMBERS AND PERMITS

Standard Industrial Classification (SIC) <u>3498</u>	Environmental Control Permits Issued for Applicant Site:
EPA WAD No. <u>WA80738546</u>	NPDES # <u>503-000139</u>
Water/Sewer Account No. <u>*01710110-005-9</u>	PSAPCA Registration # <u>16300</u>
Current Metro Permit No. <u>7201</u>	

* 01710120-005-7, 01710100-005-1

Wastewater Discharge Permit Application



SECTION C—PRODUCT AND PROCESS DESCRIPTION

1. REQUIRED EXHIBITS

EXHIBIT A: SCHEMATIC FLOW DIAGRAM

EXHIBIT B: SITE LAYOUT

EXHIBIT C: PLANNED CHANGES IN PRETREATMENT OR WASTE DISPOSAL PRACTICES

EXHIBIT D: ANALYTICAL OR HISTORICAL DATA

EXHIBIT E: SPILL PREVENTION AND CONTAINMENT PLAN

EXHIBIT F: ENGINEERING REPORT (Required only if you have wastewater pretreatment systems or are intending to install such systems.)

2. OPTIONAL EXHIBIT

EXHIBIT G: HYDROGEOLOGIC REPORTS FOR LONG-TERM GROUNDWATER REMEDIATION.

3. DAILY AND SEASONAL VARIATIONS

	No. of Operating Days/Year	No. of Operating Days/Season				No. of Employees/Shift		
		Spring	Summer	Autumn	Winter	Day	Night	Swing
Average	250	60	63	62	65	7	NA	NA
Maximum	255	60	64	64	67	15	NA	NA

4. BUSINESS ACTIVITIES AND PRODUCTS

Business activities include both manufacturing and remediation activities.

Business Activity	Type of Product or Brand Name	Daily Quantities	
		Average	Maximum
Fabrication of pipe and fittings	Pipe and Fittings	100Ft/day	270Ft/day

SECTION C—PRODUCT AND PROCESS DESCRIPTION (continued)

5. RAW MATERIALS AND CHEMICALS USED IN THE PROCESS

Brand Name	Chemical, Scientific, or Actual Name	Purpose	Daily Quantities	
			Average	Maximum
Nitric Acid 10% Sol	Nitric Acid	Passivating	4 LB	12 LB
Oaklite Stripper M3	Sodium Hydroxide	Degreaser	1 LB	2 LB
Ammonium bifluoride	Ammonium bifluoride	Additive to Nitric Acid	1 LB	4 LB
Caustic Soda 50%	Sodium Hydroxide	Neutralizer	4 LB	9 LB

6. INDUSTRIAL WASTEWATERS DISCHARGED TO METRO SEWERS

Process That Generates Wastewater (1)	Substances Discharged to Sewer	Type of Pretreatment	Frequency (2)	Daily Quantities	
				Average	Maximum
Drag out from passivation bath and rinse water	Cu, Ni, Cr, Zn	PH Adjustment	A	1500 gal	3,500 gal

(1) Enter a brief description and assign a number for each process. Also show these numbers in Exhibits A and B.
 (2) Indicate appropriate letter: (a) continuously discharged when generated, or (b) stored and discharged in batches.

7. LIQUID WASTES AND SLUDGES REMOVED BY MEANS OTHER THAN METRO SEWERS

Type of Waste/Substance	Means of Removal	Frequency	Volume (1)
Treatment Sludge	TSDF	Tri-Monthly	630 LB
Waste Solvents	TSDF	Tri-Monthly	8 GAL
Wipe Rags	Industrial Laundry Service	Weekly	7 LB

(1) Enter annual, monthly, or daily volume—or volume of each removal.

SECTION D—WATER BALANCE**1. REQUIRED EXHIBIT**

EXHIBIT II: DOCUMENTATION OF WATER BALANCE CALCULATIONS.

2. WATER BALANCE

Type of Use/Discharge	WATER IN:			WATER OUT:		
	Water Use			Water Discharge or Loss		
	Source (1)	Average (gal/day)	Maximum (gal/day)	Discharge Point (2)	Average (gal/day)	Maximum (gal/day)
Industrial processing water/wastewater	A	2,800	3,300	A	2,800	3,300
Contact cooling water	NA			NA		
Noncontact cooling water	A	1,560	1,920	A	1,560	1,920
Boiler and cooling tower feed/blowdown	A	300	400	E	100	20
Water incorporated into product	NA			NA		
Sanitary water/wastewater	A	175	375	A	175	375
Stormwater	E		4,430	B		4,430
Plant washing water/wastewater	NA			NA		
Site irrigation	NA			NA		
Evaporation	NA			E	200	320
Other	NA			NA		
TOTALS	NA	4,835	10,425	NA	4,835	10,425

(1) Enter the appropriate letter for the water source:

a. City Service b. Private Well c. Reclaimed Water d. Raw Materials e. Stormwater f. Groundwater

(2) Enter the appropriate letter for the discharge point:

a. Sewer b. Storm Drain c. Receiving Water d. Waste Haulers e. Evaporation f. Product

(If the discharge is entering the sewers, also indicate the side sewer [ss] number, if available.)

SECTION E — CERTIFICATION

Certification should be signed by an officer of your company (president, secretary, treasurer, or vice president) or a duly authorized representative.

To the best of my knowledge, the information in this application is true, correct, and accurate.

Printed Name	Signature	Title	Date
William M. Rosen	<i>William M. Rosen</i>	MANAGER	7/5/99

E. MARGINAL WAY

← (ONE WAY) S. SPOKANE ST.

S. SPOKANE ST. (ONE WAY) →

CHAIN LINK FENCE

ACID TANK
RINSE TANK
(BOT. AREA)

3600 E. MARGINAL WY

□ #360003

□ #360004

□ #360005

10' E
10' E
10' E

□ #360007

□ #360009

□ #360008

□ #360010

□ #360013

YARD

NORTH
↑

APPROX. SCALE: 1" = 25'-0"

DRAIN SITES = □ #XXXXX

ALASKAN COPPER WORKS
3600 E. MARGINAL WAY
EXHIBIT B
SITE LAYOUT

**ALASKAN COPPER WORKS
3600 E. MARGINAL WAY
EXHIBIT C
PLANNED CHANGES**

THERE ARE NO PLANNED CHANGES

FRIEDMAN & BRUYA, INC.**ENVIRONMENTAL CHEMISTS**

Date of Report: June 16, 1994
Date Received: June 14, 1994
Project: 7238, Metro Grab Sample, PO #M34824
Date Samples Extracted: June 14, 1994
Date Extracts Analyzed: June 15, 1994

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR CHROMIUM, COPPER, NICKEL AND ZINC**
Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M34824	0.86	1.6	0.80	0.19
<u>Quality Assurance</u>				
Blank	<0.2	<0.05	<0.08	<0.05
M34824 (Duplicate)	0.81	1.5	0.76	0.18
M34824 (Matrix Spike) % Recovery	92%	86%	92%	89%
M34824 (Matrix Spike Duplicate) % Recovery	87%	81%	87%	87%
Spike Blank % Recovery	95%	91%	92%	88%
Spike Level	5	5	10	5

ALASKAN COPPER WORKS
3600 E. Marginal Way
EXHIBIT D
ANALYTICAL DATA

FRIEDMAN & BRUYA, INC.**ENVIRONMENTAL CHEMISTS**

Date of Report: June 3, 1994
Date Received: May 27, 1994
Project: 7238, Metro Self Monitor, PO #M34694
Date Samples Extracted: May 27, 1994
Date Extracts Analyzed: June 2, 1994

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR CHROMIUM, COPPER, NICKEL AND ZINC**
Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M34694	0.99	0.92	1.0	0.10
<u>Quality Assurance</u>				
Blank	<0.05	<0.05	<0.05	<0.05
M34694 (Duplicate)	1.0	0.92	1.0	0.11
M34694 (Matrix Spike) % Recovery	103%	106%	104%	103%
M34694 (Matrix Spike Duplicate) % Recovery	93%	94%	92%	91%
Spike Blank % Recovery	90%	94%	92%	91%
Spike Level	5	5	10	5

ALASKAN COPPER WORKS
3600 E. Marginal Way
EXHIBIT D
ANALYTICAL DATA

FRIEDMAN & BRUYA, INC.**ENVIRONMENTAL CHEMISTS**

Date of Report: June 3, 1994

Date Received: May 27, 1994

Project: 7238, Metro Self Monitor, PO #M34694

Date Samples Extracted: May 27, 1994

Date Extracts Analyzed: June 2, 1994

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE
FOR CHROMIUM, COPPER, NICKEL AND ZINC**
Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M34694	0.99	0.92	1.0	0.10
<u>Quality Assurance</u>				
Blank	<0.05	<0.05	<0.05	<0.05
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**ALASKAN COPPER WORKS
3600 E. Marginal Way
EXHIBIT D
ANALYTICAL DATA**

Alaskan Copper Works
3200 6th Ave South
3600 E. Marginal Way

Exhibit E - Spill Prevention and Containment Plan

The following is a list of names and phone numbers of who should be contacted if a spill or similar emergency occurs:

Jim Brown Operations Manager (Emergency Coordinator)	Office: 623-5800 EXT 572 Cellular: 399-3003 Home: (b) (6)
Peter Monsaas Maintenance Superintendent	Office: 623-5800 EXT 224 Home: (b) (6)
Ron Lohse Maintenance Supervisor	Office: 623-5800 EXT 569 Home: (b) (6)
Gerald Thompson Maintenance Specialist	Office: 623-5800 EXT 218 Home: (b) (6)

Major Chemicals and Metal Wastes at Alaskan Copper and Brass

Manufacturing activities at Alaskan involve the use of chemicals such as strong acids for passivating. Chemicals used in, and metal wastes resulting from, these operations are described below for each buildings 3200 and 3600.

Passivating Process

Passivating bath acid, (Nitric Acid and Ammonium Bifluoride)

Oakite M3 (75% sodium hydroxide)

The following table lists chemicals that Alaskan may have on site at some time at or above the associated RQ.

Product	Constituent	Percent	Designation	RQ
Oakite	Sodium Hydroxide	75%	HS	1,000 lbs
Nitric Acid solution	Nitric Acid	68%	EHS	1,000 lbs
Sodium Hydroxide		50%	EHS	1,000 lbs

Passivating Area

The Passivating Areas are housed in buildings 3200 & 3600. Stainless steel pipe is dipped in a 10% nitric acid bath followed by a water rinse bath. A filter press is used for collecting and draining sludge. The sludge is hazardous and disposed of properly. The neutralizing control center for the acid is located just inside the building near the Passivating Area. The neutralizing control center consists of a collection pit, two holding

All other personnel receive a brief overview of the importance of Material Safety Data Sheets and their contents during orientation. At a later date personnel receive a hour block of instruction which includes two videos covering MSDS's and labels used on chemical products.

Please find attached Figure 3-7 of Alaskan Copper's Contingency Plan which depicts the form used to document training of all other personnel.

Emergency Personnel

Alaskan Copper and Brass has designated personnel to respond to emergency situations, including an Emergency Coordinator.

Responsibilities of the Facility Emergency Coordinator

The Emergency Coordinator is responsible for coordinating all planning and readiness activities before an emergency occurs and all response activities during an emergency.

Pre-emergency planning consists of the following activities:

- Updating the facilities contingency plan.
- Ensuring that all required emergency response equipment is present and in good working order.
- Coordinate training of personnel who handle hazardous chemicals at the facility.

In the event of an emergency, responsibilities of the Emergency Coordinator include:

- Assessing hazards.
- Monitoring potentially hazardous situations.
- Identifying materials involved in a release.
- Notifying facility personnel in the event of an emergency.
- Making sure any injured personnel get medical treatment.
- Coordinating response efforts.
- Contacting off-site emergency personnel.
- Coordinating necessary evacuations.
- Properly managing all recovered materials and wastes.
- Ensuring that all equipment is returned to proper working order.
- Providing proper notification (verbal or written) to all appropriate agencies.
- Records all incidents at the facility.

Emergency Response Equipment

Although most fires, spills and explosions at Alaskan will be handled by outside emergency responders, the following emergency response equipment is maintained at the facility to respond to, and contain the emergency situation until outside help arrives.

- Spill Absorbent Materials
- Fire Extinguishers
- Walkie Talkies
- PA system

building near the Passivating Area. The neutralizing control center consists of a collection pit, two holding tanks, and an automatic treatment control system. Small parts are cleaned in the oakite stripping tank, located near the acid bath.

Emergency prevention equipment found in this area includes:

- Safety Glasses

- An alarm in the neutralizing center that sounds when there is a system malfunction

- Containment walls around the acid baths

Signs reading "Danger, Handling Chemicals" are used when acid in the baths is being charged. A first aid station is located in the office area. Eye wash systems and showers are in the process area and neutralizing control center.

A regular maintenance program is in place to ensure that equipment is functioning properly and to inspect for potentially dangerous situations such as leaks. Please find attached Figure 3-6 of Alaskan Copper's Contingency Plan is an inspection form used to document inspections of the area.

Please review Exhibit B of both requests for Metro permits for buildings 3200 and 3600 which shows that the layout of the Passivating Area is open for easy access and escape in an emergency at both buildings.

Chemical Control Area

The chemical control area is located behind building 628. This area is where chemicals are stored when not in use in other areas of the facility. Sodium hydroxide, oil products, and wastes awaiting characterization or disposal are kept here. Storage bins of janitorial and office supplies are also in this area. This area is 903 square feet.

The locker that sodium hydroxide is stored in has a grated floor throughout, a catch basin under the storage locker where barrels are kept, and proper labeling of those barrels, even when empty. The inside of the locker is burned.

The oakite used in this process is stored in Bldg 3200 and 3600; is added to the stripping tank as needed by the senior operator in the area. The nitric acid is ordered and used as soon as it's brought on to the property.

Training

The Emergency Coordinator, Alternate Emergency Coordinator, and supervisors at Alaskan Copper and Brass are trained on the contents of the Contingency Plan including:

- Wastes in each area of the facility

- Waste handling procedures

- General spill response guidelines

- Possible dangerous contaminants

- What to do when dangerous wastes are discovered

- Not to mix dangerous and non-dangerous wastes

- What to do in case of a spill

Emergency Prevention

Figure 3-6

ALASKAN COPPER

MAINTENANCE WORK ORDER

WORK ORDER #:

CFT/SKILL:

CATEGORY:

ORIG:

TEL #:

APPVD:

EQUIPMENT #:

DEPARTMENT:

ACCOUNT #:

BUILDING :

AREA/ROOM:

CHARGEABLE:

SUPV:

EMPL #1:

EMPL #2:

EMPL #3:

STAT:

PRITY:

ALT:

REASON:

DATE - OPEN:

REL'SE:

SCHD:

CLOSED:

EST. - HRS:

MAT'L:

SUB:

TOT'L:

ACT. - HRS:

MAT'L:

SUB:

TOT'L:

WORK :
TO :
BE :
DONE :

TYPE/CODE OF WORK
REQUIRED

PERFORMED BY:

ACCEPTED BY:

DATE: / /

Emergency Prevention

Figure 3-7

**ALASKAN COPPER & BRASS COMPANY
ALASKAN COPPER WORKS**

**CHEMICAL HAZARD COMMUNICATION PROGRAM
TRAINING CERTIFICATION**

I have received Hazard Communication Training as described in the Hazard Communication Program. This training was conducted on the _____ day of _____, 19____

Work Area (check the appropriate area)

_____ 3223 6th Ave South
_____ 3301 6th Ave South
_____ 628 So. Hanford
_____ 2958 6th Ave South
_____ 3200 6th Ave South
_____ 3317 6th Ave South
_____ 3405 6th Ave South
_____ 3600 E. Marginal Way
_____ 3350 8th Ave South
_____ 17450 Tukwila

Employee Signature

Social Security Number

I hereby certify that the above named employee has been provided with Hazard Communication Training on _____ (Date).

Instructor's Signature

Alaskan Copper Works
3600 E. Marginal Way

EXHIBIT H- DOCUMENTATION OF WATER BALANCE CALCULATIONS

Industrial Processing/Wastewater

Determined By - Flow Meter Avg: 2800 gal/day Max.: 3300 gal/day

Non-Contact Cooling Water

Determined By - Max. flow possible of air compressor is 5 gal/min; which equals to 300 gal/hr times 8 hours a day is equal to 2400 gal/day.

Compressor operating at 45% of work hours $(2400 * 45) = 1560$ gal/day

Compressor operating at 65% of work hours $(2400 * 65) = 1920$ gal/day

Boiler & Feed /Blowdown

Determined By - Capacity of boiler is 50 gal/hr ; times 8 hours a day is equal to 400 gal/day.

Estimated blowdown is 20% or 80 gal/day.

Estimated evaporation is 80% or 320 gal/day.

Sanitary Water/Wastewater

Average number of employees on site is 7 ; times 25 gallons ; which is equal to 175 gal/day.

Maximum number of employees on site is 15 ; times 25 gallons ; which is equal to 375 gal/day.

Stormwater

The square footage of 3600 E. Marginal Way 74,000.

Average yearly rainfall for Seattle is 3'.

Average daily rainfall for Seattle is .10" or .008'.

Average daily volume is .008' times 74,000 sq. ft equals to 592 cu.ft

$592 \text{ cu ft} \times 7.48 \text{ gal/cu ft} = 4,428 \text{ gal/day}$